NOTES ON THE ALGAE OF THE RIDEAU, ONTARIO.

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THE Rideau canal system runs from Kingston, Ontario, to Ottawa, the route being by way of the Cataraqui River, a chain of lakes and the Rideau River. In July, August and September, 1911, the writer made a reconnaissance of the Algal-flora of these waters as far as Lake Opinacon, some forty miles from Kingston. Most work was done at Kingston Mills, seven miles up from Kingston, and at Lake Opinacon.

The following is presented merely as a preliminary list, the species marked with an asterisk being here recorded from Canada for the first time.

CYANOPHYCEAE.

Aphanothece microscopica, Naegeli. Among other Algae on stones and snags in Lake Opinacon.

Microcystis marginata, Kuetzing. As plankton in Lake Opinacon.

Coelosphaerium kuetzingianum, Naegeli. Common as plankton in Lake Opinacon. The main constituent of a very dense "Water-bloom" on parts of the "Lake of Sticks" just above the locks at Kingston Mills on September 11th.

**Anabaena flos-aquae*, Brébisson. Forming a "Water-bloom," in basin off the upper lock at Kingston Mills, July 15th.

**Dichothrix hosfordii*, Bornet. Common on submerged rocks in Lake Opinacon.

Rivularia pisum, Agardh. On drifting water-plants at Jones' Falls. On leaves of *Potamogeton amplifolius* in Lake Opinacon.

**Rivularia incrustata*, De Toni. Forming gelatinous nodules on stems of *Scirpus americanus* near the mouth of the Cataraqui River, July 22.

CHLOROPHYCEAE.

Spirogyra weberi, Kuetzing. In the Cataraqui River near its mouth. This material was so abundantly fruited that it was difficult to find a vegetative cell.

Nephrocytium agardhianum, Naegeli. Among plankton in Lake Opinacon.

Tetraedron minimum, Hansgirg. Plankton, Lake Opinacon.
Tetraedron regulare, Kuetzing. Plankton, Lake Opinacon.
Scenedesmus bijuga, Wittrock. Plankton, Lake Opinacon.
Scenedesmus quadricauda, Brébisson. In plankton, Lake Opinacon.
Coelastrum microporum, Naegeli. Among plankton, Lake Opinacon.
Hydrodictyon reticulatum, Lagerheim. Common in a pool below the falls at Kingston Mills, July 15th.

Pediastrum boryanum, Meneghini. Common in plankton, Lake Opinacon.

**Pediastrum duplex*, Meyer. Plankton, Lake Opinacon.

Pediastrum tetras, Ralfs. Plankton, Lake Opinacon.

Gloiococcus mucosus, A. Braun. Scarce in plankton, Lake Opinacon.

**Coleochaete soluta*, Pringsheim. Common on *Potamogeton amplifolius* in Lake Opinacon.

**Coleochaete orbicularis*, Pringsheim. On drifting water-plants at Jones Falls. Common on *Potamogeton amplifolius* in Lake Opinacon.

Cladophora fracta, Kuetzing. Floating in great masses at the mouth of the Cataraqui River.

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The pink-flowered Form of Lupinus perennis.— It has been known for a long time that our common Lupine, *Lupinus perennis* L., occasionally varies from the typical blue or purplish-blue to pink or white, and our manuals contain frequent references to this fact. In the Bulletin of the Torrey Botanical Club for 1890, volume XVII, page 124, Dr. N. L. Britton made the following note, "*Lupinus perennis* L., forma *rosea*. Flowers beautifully pink. May's Landing, Atlantic Co., [New Jersey] Dr. J. E. Peters." As long ago as 1814, Pursh in his Flora Americae Septentrionalis, vol. II, page 467, says, "Flowers blue, purple, and sometimes white." Emma J. Cole in the Grand Rapids Flora [Michigan], 1901, page 96, says, "Flowers are blue, white, purple or pink; forms with pink flowers are found along Hogadone Creek (W. M. Clark)." In the Michigan Flora by W. J. Beale and C. F. Wheeler, 1892, page 83, we read, "Flowers, a fine blue-purple, varying to light pink." And to cite one more reference, in Plants of Monroe County, New York, and adjacent Territory by